UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,896	03/25/2004	Bryan L. Dalton	LM(F)6496 NP	7411

26294 7590 07/26/2006

TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.
1300 EAST NINTH STREET, SUITE 1700
CLEVEVLAND, OH 44114

EXAMINER	
SAMS, MATTHEW C	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/808,896	DALTON ET AL.	
	Examiner	Art Unit	
	Matthew C. Sams	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This office action is in response to the amendment filed on 5/8/2006.

2. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.

Claim Objections

3. Claims 16-20 objected to because of the following informalities: "claim 15 further including a fourth instruction", when the amendment filed on 5/8/2006 added a fourth instruction to claim 15. The "fourth instruction" in claims 16-20 should be changed to "fifth instruction". Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1, 8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch et al. (US-5,896,566 hereafter, Averbuch) in view of Dimenstein et al. (US 2002/0086703 hereafter, Dimenstein).

Regarding claim 1, Averbuch teaches a system for upgrading a plurality of mobile data acquisition devices (Fig. 1) comprising a software upgrade for use with the mobile data acquisition devices, the software upgrade being located on a software management computer (Fig. 1 [104], Col. 2 lines 54-62, Col. 3 lines 48-63 and Col. 5 lines 20-53) and a docking device that simultaneously recharging the mobile data acquisition devices and transferring the software upgrade to the mobile data acquisition devices when the mobile data acquisition devices are docked in the docking device. (Fig. 1 [108] and Col. 2 line 63 through Col. 3 line 6) Averbuch differs from the claimed invention by not explicitly reciting the docking device is coupled a local communications computer.

In an analogous art, Dimenstein teaches a local communications computer that transfers software upgrades to a mobile computing device docking station, the docking device transfers the software upgrade to the mobile data acquisition devices when the mobile data acquisition devices are docked in the docking device. (Page 1 [0004 and 0018-0020] and Page 2 [0023]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the method of updating portable wireless communication units of Averbuch after modifying it to include a local communications computer attached to the docking device of Dimenstein. One of ordinary skill in the art would have been motivated to do this since connecting a docking device to a local communications computer enables the user to connect the mobile computing device to all the peripherals connected to the local computer and backup

files from the mobile computing device on their local computer. (Page 1 [0004, 0006 & 0020])

Regarding claim 8, Averbuch in view of Dimenstein teaches the mobile device maintains a staging area for temporarily storing the software upgrade. (Averbuch Col. 3 lines 7-40 and Dimenstein Page 3 [0037])

Regarding claim 10, Averbuch in view of Dimenstein teaches the mobile device marks a staging area as an execution area and marks an execution area as a staging area. (Averbuch Col. 3 lines 7-40 and Dimenstein Page 3 [0037])

Regarding claim 11, Averbuch teaches a system for upgrading a software application comprising a data acquisition device for use with the software application (Fig. 1 [101]), a software management computer for transmitting an upgrade of the software application from the software management computer to the data acquisition device (Fig. 1 [104], Col. 2 lines 54-62, Col. 3 lines 48-63 and Col. 5 lines 20-53) and a charging cradle fro recharging a battery of the data acquisition device while providing a direct line power to the data acquisition device and the charging cradle transferring the upgrade to the data acquisition device. (Fig. 1 [108] and Col. 2 line 63 through Col. 3 line 6) Averbuch differs from the claimed invention by not explicitly reciting the charging cradle is coupled a local communications computer and the local communications computer is interconnected to the data acquisition device and the software management computer with the upgrade of software being transferred from the software management computer to the local communications computer to the data acquisition device.

In an analogous art, Dimenstein teaches a local communications computer that transfers software upgrades to a mobile computing device docking station, the docking device transfers the software upgrade to the mobile data acquisition devices when the mobile data acquisition devices are docked in the docking device. (Page 1 [0004 and 0018-0020] and Page 2 [0023]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the method of updating portable wireless communication units of Averbuch after modifying it to include a local communications computer attached to the docking device of Dimenstein. One of ordinary skill in the art would have been motivated to do this since connecting a docking device to a local communications computer enables the user to connect the mobile computing device to all the peripherals connected to the local computer and backup files from the mobile computing device on their local computer. (Page 1 [0004, 0006 & 0020])

Regarding claim 12, Averbuch in view of Dimenstein teaches the data acquisition device initiates transfer of the upgrade of the software application from the software management computer through the local communications computer. (Averbuch Fig. 1 [104], Col. 2 lines 54-62, Col. 3 lines 48-63 and Col. 5 lines 20-53, Dimenstein Page 1 [0004 and 0018-0020] and Page 2 [0023])

Regarding claim 13, Averbuch in view of Dimenstein teaches the local communications computer stores the upgrade for other data acquisition devices. (Dimenstein Page 1 [0020])

6. Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch in view of Dimenstein as applied to claim 1 above, and further in view of Riordan et al. (US 2003/0100297 hereafter, Riordan).

Regarding claim 2, Averbuch in view of Dimenstein teaches a system for software management for a mobile device as claimed in claim 1, but differs from the claimed invention by not explicitly reciting a bill of materials for the software upgrade.

In an analogous art, Riordan teaches a method of remote software configuring in programmable mobile devices (Page 1 [0001], [0012] and Page 3 [0032]) that includes a master bill of materials file for the software upgrade version verification on a central server. (Page 1 [0013]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Averbuch in view of Dimenstein after modifying it to incorporate a bill of materials for software version verification of Riordan. One of ordinary skill in the art would have been motivated to do this since it version verification ensures mobile device compatibility with the wireless network. (Riordan Page 1 [0004, 0013 & 0014])

Regarding claim 3, Averbuch in view of Dimenstein and Riordan teaches a local communications computer stores a local bill of materials file for the software upgrade. (Riordan Page 1 [0013] through Page 2 [0016])

Regarding claim 4, Averbuch in view of Dimenstein and Riordan teaches the local bill of materials and the master bill of materials are compared to determine what version of software the mobile device is using and whether an upgrade is necessary. (Riordan Page 1 [0013-0015] & Page 2 [0018-0020])

Regarding claim 5, Averbuch in view of Dimenstein and Riordan teaches the mobile data acquisition device verifies a version of software held by the mobile data acquisition device. (Riordan Page 1 [0015] through Page 2 [0019])

7. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch in view of Dimenstein as applied to claim 1 above, and further in view of Kincaid (US 2004/0117785).

Regarding claim 6, Averbuch in view of Dimenstein teaches a system for software management for a mobile device as claimed in claim 1, but differs from the claimed invention by not explicitly reciting the mobile data acquisition device reboots after obtaining the software upgrade.

In an analogous art, Kincaid teaches a component download manager for a wireless mobile device (Page 1 [0008]) that includes a master bill of materials with software revision numbers, a local bill of materials for comparison with the master bill of materials (Page 1 [0008-0012]), and after the download manager replaces the old versions of files, the mobile device is rebooted. (Fig. 4 [435] and Page 5 [0053]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the system for software updating of Averbuch in view of Dimenstein after modifying it to incorporate the mobile device rebooting of Kincaid. One of ordinary skill in the art would have been motivated to do this since requiring the reboot of a mobile device enables the recently downloaded programs to be installed on the mobile device, initiated on the mobile device and ensures the old software is no longer running in memory. (Kincaid Page 5 [0053])

Regarding claim 7, Averbuch in view of Dimenstein and Kincaid teaches the software upgrade is the upgraded part of an entire software application. (Kincaid Fig. 4 [410, 415, 420, 425 & 430])

8. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch in view of Dimenstein as applied to claim 1 above, and further in view of Ji et al. (US-6,836,657 hereafter, Ji).

Regarding claim 9, Averbuch in view of Dimenstein teaches a system for software management for a mobile device as claimed in claim 1, but differs from the claimed invention by not explicitly reciting restoring a prior version of the software upgrade if the verification of the software upgrade fails.

In an analogous art, Ji teaches a method for updating software in a wireless mobile device (Col. 3 lines 23-25) that includes error detection wherein the error detection restores the client device to the pre-update state of operation. (Col. 3 lines 23-30) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the system for updating software of Averbuch in view of Dimenstein after modifying it to incorporate the software restoration if an error is detected of Ji. One of ordinary skill in the art would have been motivated to do this since the ability of a wireless device to restore the original software configuration gives the software the ability to try to resume or re-initiate the software update. (Col. 3 lines 23-30)

9. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch in view of Dimenstein as applied to claim 11 above, and further in view of Riordan.

Regarding claim 14, Averbuch in view of Dimenstein teaches a system for upgrading a software application as claimed in claim 11, but differs from the claimed invention by not explicitly reciting the data acquisition device acknowledges receipt of the upgrade from the software management computer.

In an analogous art, Riordan teaches the data acquisition device acknowledges receipt of the upgrade form the software management computer. (Fig. 5 and Page 3 [0028-0031]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the system for software updating of Averbuch in view of Dimenstein after modifying it to incorporate the upgrade acknowledgement of Riordan. One of ordinary skill in the art would have been motivated to do this since the network's configuration management server knows the current status of the data acquisition device in order to enable specific services and can inform the device of another software update. (Fig. 5 and Page 3 [0028-0031])

10. Claims 15 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch in view of Riordan.

Regarding claim 15, Averbuch teaches a computer program product for upgrading a software application comprising a first instruction for initiating communication between a mobile device and a software management computer (Fig. 1 [104], Col. 2 lines 54-62 and Col. 5 lines 20-46), a second instruction for initiating

transfer of an upgraded portion of the software application from the software management computer to the mobile device (Col. 3 lines 48-63 and Col. 4 lines 5-29) and an instruction for recharging the mobile device and powering the mobile device with direct line power. (Col. 2 line 63 through Col. 3 line 6 and Col. 3 lines 41-47) Averbuch differs from the claimed invention by not explicitly reciting an updating of the master bill of materials to indicate the updating of the software.

In an analogous art, Riordan teaches a method of remote software configuring in programmable mobile devices (Page 1 [0001], [0012] and Page 3 [0032]) that includes a master bill of materials file for the software upgrade version verification on a central server. (Page 1 [0013]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the software updating of Averbuch after modifying it to incorporate a bill of materials for software version verification of Riordan. One of ordinary skill in the art would have been motivated to do this since it version verification ensures mobile device compatibility with the wireless network. (Riordan Page 1 [0004, 0013 & 0014])

Regarding claim 18, Averbuch in view of Riordan teaches the instructions for activating the upgrade of the software application on the mobile device. (Riordan Page 2 [0020])

Regarding claim 19, Averbuch in view of Riordan teaches the mobile device maintains a staging area for temporarily storing the software upgrade. (Averbuch Col. 3 lines 7-40 and Riordan Page 3 [0030])

Regarding claim 20, Averbuch in view of Riordan teaches the computer program has the ability to save the software upgrade in memory in order to update the software of another mobile device. (Riordan Pages 1-2 [0013-0022], Fig. 1 [116] and Figs. 2-5)

11. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch in view of Riordan as applied to claim 15 above, and further in view of Dimenstein.

Regarding claim 16, Averbuch in view of Riordan teaches the limitations of claim 15 above, but differs from the claimed invention by not explicitly reciting the transfer of the upgrade of the software application from the software management computer through a local communications computer.

In an analogous art, Dimenstein teaches a local communications computer that transfers software upgrades to a mobile computing device docking station, the docking device transfers the software upgrade to the mobile data acquisition devices when the mobile data acquisition devices are docked in the docking device. (Page 1 [0004 and 0018-0020] and Page 2 [0023]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the method of updating portable wireless communication units of Averbuch in view of Riordan after modifying it to include a local communications computer attached to the docking device of Dimenstein. One of ordinary skill in the art would have been motivated to do this since connecting a docking device to a local communications computer enables the user to connect the mobile computing device to all the peripherals connected to the local computer and

backup files from the mobile computing device on their local computer. (Page 1 [0004, 0006 & 0020])

12. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Averbuch in view of Riordan as applied to claim 15 above, and further in view of Kincaid.

Regarding claim 17, Averbuch in view of Riordan teaches a system for upgrading software as claimed in claim 15, but differs from the claimed invention by not explicitly reciting an instruction for rebooting the mobile device.

In an analogous art, Kincaid teaches a component download manager for a wireless mobile device (Page 1 [0008]) that includes a master bill of materials with software revision numbers, a local bill of materials for comparison with the master bill of materials (Page 1 [0008-0012]), and after the download manager replaces the old versions of files, the mobile device is rebooted. (Fig. 4 [435] and Page 5 [0053]) At the time the invention was made, it would have been obvious to one of ordinary skill in the art to implement the invention of Averbuch in view of Riordan after modifying it to incorporate the mobile device rebooting of Kincaid. One of ordinary skill in the art would have been motivated to do this since requiring the reboot of a mobile device enables the recently downloaded programs to be installed on the mobile device, initiated on the mobile device and ensures the old software is no longer running in memory. (Kincaid Page 5 [0053])

Response to Arguments

13. Applicant's arguments with respect to claims 1, 11 and 15 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US-6,687,901 to Imamatsu regarding a method and apparatus for updating software in a radio terminal device.
- US-6,199,204 to Donohue regarding distribution of software updates via a computer network.
- US-6,052,600 to Fett et al. regarding a software programmable radio and method for configuring.

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew C. Sams whose telephone number is (571)272-8099. The examiner can normally be reached on M-F 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lester Kincaid can be reached on (571)272-7922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MCS
7/13/2006

LESTER G. KINCAID
SUPERVISORY PRIMARY EXAMINER